

Date: Wed, 15 Jun 94 04:30:19 PDT
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #187
To: Ham-Equip

Ham-Equip Digest Wed, 15 Jun 94 Volume 94 : Issue 187

Today's Topics:

AOR Scanner repairs/experiences
BOATANCHOR GEN. COV. RX IN NEED :*>
Drake TR-7 ..Should I??
European vs American Radios
Kenwood TH-22AT Mods?
Kenwood TK-200 Transceiver (NEED INFO)
Need info on ICOM 229H
Poor Man's UHF Transmitter Combiner? (2 msgs)
Sangean ats803 4 sale
Seek info about Heathkit SB230 (SB220)
WANTED: Low RFI laptop
What do Ten-Tec Paragons sell for? (2 msgs)

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 14 Jun 1994 18:32:55 GMT
From: news2.near.net!noc.near.net!usenet.elf.com!rpi!newsserver.pixel.kodak.com!
apache!piazza@yale.arpa
Subject: AOR Scanner repairs/experiences
To: ham-equip@ucsd.edu

Hello, I want to send my AOR2500 scanner to AOR to get it repaired, but in light
of the new ban on listening to certain frequencies, I don't want them to send it
back
to me with new reception gaps in it. The scanner currently covers .5 Mhz to 1.6
Ghz

continuously. Anyone out there with practical experience with this issue? Thanks.

Date: 15 Jun 94 03:01:03 EDT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
newsxfer.itd.umich.edu!gumby!wmichgw!x90galbrait1@network.ucsd.edu
Subject: BOATANCHOR GEN. COV. RX IN NEED :*>
To: ham-equip@ucsd.edu

Greetings,

Looking for a boatanchor general coverage rx!
How about an R-388/51J3, R390(A), Hammarlund HQ-180, Hallicrafters SX-88,
SX-99, SX-100, TMC GRC-90, or (insert rx here)!?

Help me itch my boatanchor scratch! Any information leading to the discovery
and acquisition of such a beauty would be rewarded by my eternal gratitude, and
my girlfriend's scorn (she'd prefer that I'm not kept warm by OA2s and the like
when she is supposed to perform that function on cold winter nights-hi)!!

73s,
Chris, KA8WFC

Date: Tue, 14 Jun 94 17:00:12 EDT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!usenet.ins.cwru.edu!
ns.mcs.kent.edu!kira.cc.uakron.edu!malgudi.oar.net!hypnos!voxbox!
jgrubs@network.ucsd.edu
Subject: Drake TR-7 ..Should I??
To: ham-equip@ucsd.edu

-----BEGIN PGP SIGNED MESSAGE-----

ldfrost@ldf.NoSubdomain.NoDomain (new user) writes:

> CQ CQ CQ Netland.
>
> I am looking at a DRAKE TR-7 (TR???) HF tranceiver that a fella is wanting to
> sell me for \$500.00.
>
> Can anyone send me info on the good or bad points on this rig, as well as
> opinions on if it is worth the 5 bills.

Darn fine radio in it's day (1980ish), but unless it is in mint
condition, \$500 is on the edge of getting a little high.

It is very good on SSB, CW, and RTTY. The receiver is fairly sensitive and low noise, although not quite so hot on 10 meters. There was no RF stage, and the first time I used it, I cranked the gain because it was so quiet. When I tuned across the first signal I came to, it was so loud it darn near broke my headphones.

It was triple conversion with the first IF at 40 mhz. The IF filters were SHARP and smooth. There was front panel passband tuning on receive and under the hood bandpass tuning on transmit to adjust for oddball RTTY AFSK tones and to match SSB audio to the user's voice.

The Drake noise blanker was exceptional, but even without it I was able to run HF mobile with negligible ignition noise.

The final protection scheme was very good. Rather than wait until it sensed trouble and then try to turn you off in time to avoid damage, it would not let you come all the way up to full power until after it decided it liked the load it saw. With a fan, it has a 100% RTTY duty cycle.

The VFO was analog with a digital counter with 100 hz resolution. The frequency control scheme was a little unusual, but very effective. It was general coverage receive and non-WARC hamband only on transmit, however the conversion to general coverage transmit is an easy jumper snip and obviously what Drake intended for use with their mil/gov customers. You need Drake's extended frequency coverage board ONLY if you have some need to use crystal control of the transmit frequency.

The output control enable you to turn output down to 1 watt or less if you wanted to work locals or QRP.

All in all, it was a rugged, quality radio that was fun to use. It would be a good beginner's rig. However, if you like modern Japanese radios that make your coffee, wind up the cat, and put out the clock, you might feel deprived.

-----BEGIN PGP SIGNATURE-----

Version: 2.6

iQCVAgUBLf4h2TDUWq8RWEeNAQHbpgP/SrKc4KYssHTZNz1fDmcKL67vSbggGQWI
yvRHsqTLXu9DKXKhRRQBapPfo0FpjpYcEtbAnI5re/2NFIUxvN6mN/YqYzxvDZ8i
EmNXgrEoH+Y+Mab6Ak+EpGluyT8PSWfLiAEHAXq8T7k1Fnq/5oFccdzTWv43FPV
xfU5AS5ss1M=
=ASJg

-----END PGP SIGNATURE-----

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+-----+
|           I am Homer of Borg.  Prepare to be...00oooooo!  Donuts!!!           |
| Jim Grubs, W8GRT                Voxbox Enterprises    THIS SPACE FOR RENT      |
| jgrubs@voxbox.norden1.com       6817 Maplewood Ave.   RATES REASONABLE        |
| Fido: 1:234/1.0                 Sylvania, Ohio 43560  Home: 419/882-2697       |
|                               AMATEUR RADIO - The National Park of the Mind      |
+-----+
```

Date: 14 Jun 1994 12:49:25 GMT
From: cronkite.cisco.com!mvermeer-ssclx!mvermeer@ames.arpa
Subject: European vs American Radios
To: ham-equip@ucsd.edu

I know of some differences between the american and european versions of the Kenwood gear (but some of it is probably applicable to other manufacturers):

- The american versions do not have 1750Hz tone for activating repeaters. The 1750 tone module can be installed afterwards.
- The european 2m band is 144-146, the american is 144-148.
- The european models cannot be configured as repeater (without internal modifications).

An 'american model' can be changed to an 'european model' by changing some straps (or did you think that they where really different in their hardware).

hope this helps,

Marc, on1amv.

Date: 14 Jun 94 19:30:22 EST
From: ccsua.ctstateu.edu!bourque_par@yale.arpa
Subject: Kenwood TH-22AT Mods?
To: ham-equip@ucsd.edu

Hello everyone,

I'm a recently licenced tech class ham (still waiting for that ticket) and have purchased a Kenwood TH-22AT H.T. I would like to know if there are any mods

available for it. Thanks!

-Paul

(please E-Mail replies, as I hardly ever get to read this group)

```
*-----*
* Paul Bourque | Host of *
* Engineering Technician- WFCS Radio | "Nocturnal Emissions" *
* Central Conn State University | Friday mornings: 3-6AM *
* 1615 Stanley St. New Britain, CT | on 91.3fm WWUH *
* 05050 (203) 223-6767 | and *
* E-Mail: | Host of "Cerebellum Flambe" *
* BOURQUE_PAR@CCSUA.CTSTATEU.EDU | Monday nights: 8-10pm *
* PBOURQUE@NYX.CS.DU.EDU | on 107.7fm WFCS *
*-----*
```

Date: 14 Jun 1994 23:49:26 -0000
From: news.delphi.com!news.delphi.com!not-for-mail@uunet.uu.net
Subject: Kenwood TK-200 Transceiver (NEED INFO)
To: ham-equip@ucsd.edu

I am looking for feedback from anyone that is familiar with this unit. I have crystals for this unit to use on the 2 meter amateur band but need info on adjusting unit to get it to oscillate on the 2 meter band. Any info would be appreciated.

73 de Russ, N8MYO

RUSSELANEY@delphi.com or n8myo@hamgate.cc.wayne.edu

Date: Tue, 14 Jun 1994 15:14:27 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
n1ist@network.ucsd.edu
Subject: Need info on ICOM 229H
To: ham-equip@ucsd.edu

In article <1994Jun13.200317.1@ccsua.ctstateu.edu> white@ccsua.ctstateu.edu writes:

-What is an ICOM 229H 2 M rig? FM, SSB? AC or DC?

The 229H is a 2 meter mobile, 50 Watt rig. Runs on 13.8V ~10A at hi power (it has 4 power levels). It will RX from 138-172 or thereabouts (can't remember if it does aircraft) and it can be hacked for extended TX for MARS or CAP. It's a nice little rig for both mobile and home use.

73,

/mike

--

```
\\|/      Michael L. Ardai      N1IST      Teradyne ATB, Boston MA
-*-----
/|\      ardai@maven.dnet.teradyne.com      n1ist@netcom.com
```

Date: Mon, 13 Jun 1994 19:02:19 GMT

From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!darwin.sura.net!
osceola.cs.ucf.edu!fang!ulysses!lznj!lznj2!ncrhub2!ranger!cn2935.DaytonOH.NCR.COM!
jra@network.ucsd.edu

Subject: Poor Man's UHF Transmitter Combiner?

To: ham-equip@ucsd.edu

I'm looking for a cheap way to combine two UHF repeaters onto a single
duplexer and antenna system. We can't afford to buy a hybrid
combiner/isolator system, so this is going to be homebrew city.

Assuming that we can put the new repeater on a channel close enough to be
within the duplexer's passband, we need to come up with a way to inexpensively
combine two 35 watt UHF transmitters.

I think we can come up with several isolators, since UHF Micors have ferrite
isolators in the T/R switch and there are lots of dead ones floating
around. Our current thinking is along the lines of using two isolators in
series on each transmitter, which should give, what, 40 or 50 dB of isolation?
And the Micor isolators have a 50 watt or so dummy load on the reverse port,
so I hope they can handle the power.

Then, a Wilkinson combiner made out of quarter wave sections and a 100 ohm
noninductive resistor would provide some additional isolation and provide an
impedance match into the duplexer.

The transmitters will be 35 watt Mitreks, and we can afford to lose 3dB in
the resistors if we have to. The important things are a) not to fry the
transmitters, and b) not to generate intermod.

Does this seem like a sensible approach? Is there any other way to do this?
Our budget could handle a couple of hundred bucks, but unless we can find a
very cheap used combiner, it doesn't look like the commercial solutions are
possible for us.

Thanks for any thoughts on this...

John AG9V
jra@lawdept.daytonOH.ncr.com

Date: 14 Jun 1994 11:21:42 -0500
From: ihnp4.ucsd.edu!swrinde!news.uh.edu!uuneo.neosoft.com!sugar.NeoSoft.COM!not-
for-mail@network.ucsd.edu
Subject: Poor Man's UHF Transmitter Combiner?
To: ham-equip@ucsd.edu

In article <jra.180.000E0A4D@lawdept.daytonoh.ncr.com>,
John Ackermann <jra@lawdept.daytonOH.ncr.com> wrote:

>Assuming that we can put the new repeater on a channel close enough to be
>within the duplexer's passband, we need to come up with a way to inexpensively
>combine two 35 watt UHF transmitters.

You could also pick a frequency that's over 1 MHz away from the opposing
transmitter and combine them with notch cavities and circulators. The method
you've described could be done easily. Wilkinson power dividers and isolators
(make sure you use two isolators per port) will do quite nicely. Measure
the heck out of it after you put it together to make sure there are no intermod
problems. This is essentially how the commercial guys do it.

I've successfully combined two duplex stations on a single antenna, but one
was 440 MHz and the other was 420 MHz. It was actually pretty simple. If
you're interested, I'll drop you a copy of the diagram on it.

--
Jim Reese, WD5IYT | "Real Texans don't let the truth get in
jreese@sugar.neosoft.com | the way of a good story."

Date: Tue, 14 Jun 1994 19:03:39
From: ihnp4.ucsd.edu!swrinde!sdd.hp.com!saimiri.primate.wisc.edu!
news.doit.wisc.edu!F181-113.net.wisc.edu!jbdaniel@network.ucsd.edu
Subject: Sangean ats803 4 sale
To: ham-equip@ucsd.edu

ATS 803 500khz to 30Mhz SW receiver for sale. Unit has BFO for SSB and CW
listening. New, in box. \$150 including shipping.

Joshua Daniels

UW

Madison
jbdaniel@facstaff.wisc.edu
School
608-257-2335
Dept. of Anatomy
Amateur Radio N2JLL
608-262-3327

Med.

Date: 14 Jun 1994 20:40:19 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!sunic!trane.uninett.no!
nac.no!nntp-oslo.uninett.no!mac_inge!root@network.ucsd.edu
Subject: Seek info about Heathkit SB230 (SB220)
To: ham-equip@ucsd.edu

Hello, and thanks for reading this message.
I am going to buy me a Linear Amplifier for the HF
bands, and I seek some info about the SB230.
I have heard that it is a very nice amplifier, but I
really don't know more about it.
I have been borrowing a SB220 for a while, but I need some
info about the SB230.
Such as : -Maximum Power Output ?
 -Which amateur bands ?
 -etc

Please answer via e-mail.

vy 73s de Tom/LA1BJA/JW1BJA
tomrune@mac_inge.itek.norut.no

Date: Tue, 14 Jun 1994 22:23:23 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!wotan.compaq.com!
twisto.eng.hou.compaq.com!news@network.ucsd.edu
Subject: WANTED: Low RFI laptop
To: ham-equip@ucsd.edu

> I am afraid that almost all computers have at least some RFI
>tendencies.

True.

>The newer/more powerful/faster the more RFI they have. They

>have had this problem every since they took and got through the 10 Mhz
>barrier for the coprocessor. Unfortunately, this is also the first IF
>frequency of just about every two-way and monitoring radio made since
>1972.

Not true! Laptops are no noisier now than 5 years ago. The FCC standard that they are tested to has maintained the same levels since then. In fact many manufacturers are testing to even more stringent European standards. Also while trying to conserve battery life emissions have been reduced because of the many low power consumption components used in them. Less power used, less power radiated.

> The only cure I have found is to enclose the CPU in wood.
>This cuts the RFI by about 45-50%. I have also heard that if you back
>off the receiver micro-voltage sensitivity, that this cuts back RFI as
>well. you of would leave (of course) ventilation in the enclosure.

I don't know about shielding with wood, I have never seen it tried at any of the EMC labs I have worked for or with. {;-)) You will find that most laptops already have some sort of shielding in them i.e. a metal plated cabinet, laminated foil shields, or stamped metal shields

>
> The older tube style radios are not as vulnerable to RFI from
>computers. In larger cities, this is even more pronounced, as there are
>more computers, closer together, so RFI is even harder to avoid.!

Probably not as vulnerable because they are less sensitive than today's radios, but probably more selective than today's synthesized DC to DAYLIGHT handhelds.

As for selecting a RFI quiet computer, there are a few things you can do but no guarantees.

Stick with larger well known manufacturers. These companies have the resources it takes to staff a department solely for measuring and reducing RFI in computers.

If possible try and determine if the company has their own FCC listed Open Field Test Site.

A company that has at least one is going to care more about RFI problems.

Stay away from a buy sell operation. Though some of these may be made by a major manufacturer, most of them are made by small electronics companies in Asia that will eliminate anything they want from the design to save a buck. The RFI filtering is

one of the first things to go, right after the FCC grant is received -- naturally.

Other things to stay away from are: the top of the product line because it may have some new high tech gadgetry that will be noisier; the bottom of the line because chances are it is a low cost buy sell product.

If you are really interested in finding out which models are the quietest try getting in touch with the people who do the testing. There are labs across the country that do nothing but test and certify compliance to the FCC standards. They will probably tell you who is quietest, but in keeping their customers confidence they won't tell you who is noisy. Or contact the engineering group at the company whose product you are interested in. They would probably be happy to brag about which product they make that is quiet and let you know if the emissions are highest below 30 MHz or above it. Some companies might even give you data. Maybe! Some might say it is against company policy.

The company departments are usually called Regulatory Compliance, EMC Services, RFI, and are usually in the engineering department. They are sometimes paired up with a group called Product Safety that gets the Underwriters UL mark.

Like I said, -- No guarantees but I hope this helps. Good luck and I hope you find what you are looking for.

Earl Morse

KZ8E

kz8e@bangate.compaq.com

These views may or may not be the views of my employer, but I don't speak for him/her/it.

Date: 14 Jun 1994 13:11:04 -0400

From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net

Subject: What do Ten-Tec Paragons sell for?

To: ham-equip@ucsd.edu

In article <GB.94Jun13210218@dixie.cs.unc.edu>, gb@dixie.cs.unc.edu (Gary Bishop) writes:

>What is the going price for a Ten-Tec Paragon with 500Hz and 1.8KHz
>filters in excellent condition?

What someone is willing to sell it for provided the person buying
agrees to the amount.

Date: 14 Jun 1994 20:27:23 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!wupost!trinews.sbc.com!mac-
gianino-dt.tri.sbc.com!gianino@network.ucsd.edu
Subject: What do Ten-Tec Paragons sell for?
To: ham-equip@ucsd.edu

I'd check with Ten-Tec since they are apparently getting into the
business of at least buying back their old equipment. I got a mailing
from them yesterday directed to Paragon owners of record offering about
\$900 for my old Paragon towards the purchase of a new Paragon II. I
would certainly trust a used radio that has been checked out by the
manufacturer!

Ken - WB0QNA

End of Ham-Equip Digest V94 #187
